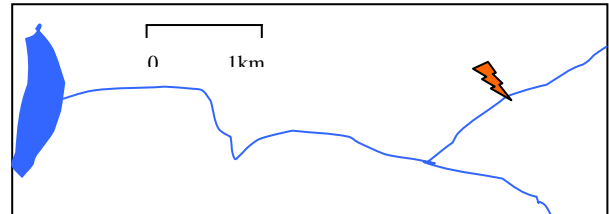


Name:

1. A **monitoring program** is to be put in place in the following catchment which empties into a small freshwater lake. A spillage of a toxic **organochlorine pesticide** is indicated at the mark. Plan a sampling protocol for the site indicating what information you will need before you start sampling and what information you need to obtain from the sampling.



2. Explain the physical basis for the **biomagnification** of toxicants such as DDT and Hg in the food chain.

3. Provide examples of **sampling devices** and **storage containers** for:
- (i) Indoor air : organic pollutants.
  - (ii) Soil : B horizon containing Pb in a labile form.
  - (iii) Sediment sample: from estuarine muds near a marine defouling operation, Sn contamination.
4. Describe the **analytical protocol** required to determine the **phosphate content** in a water that has been polluted with a hydrocarbon (petroleum oil).